Web Site k3dn.org

Warminster Amateur Radio Club

March 2024

Next Meeting April 4th - Antenna Simulators (Dan Clementi - K3GMQ)

Warminster ARC General Meeting Minutes March 7th, 2024

Call to Order: 7:30 pm by Dave (KC3RAT)

Introductions and Attendance: 36

Minutes from last Meeting: The February meeting minutes were approved as submitted.

Committee Reports:

Treasurer's Report: Tom (K3PLA) As given. Copies were available for members to review.

Programs: Dave (KC3RAT)

March – MeSH Networks April – Antenna Simulation May – Hamfest Preparations

June – Pizza Night / Bucks County History

Membership: Tony (W3FLH)

118 Members on roll, 94 in good standing; 87 Regular, 7 Alumni/Assoc.

Public Service: George (N3HBT)

May – Warminster Memorial Day Parade 5/27 from 9 AM to 1 PM

June – Golf Outing

October – Golf Outing Part 2

More information as we get closer to the dates.

Classes: Dave (K3RAT)

A General class started Tuesday 2/27 and is remote learning. A Technician class is planned for March in person. Issue discussed regarding fees that may be charged by the BWSC. If there is a fee, the classes would likely be remote.

VEC Testing: Larry (WA3ELQ)

Session 02/26/2024 Six candidates, five successful. Next session 3/25/2024.

Repeater: George (N3HBT)

All is presently good and working as expected. Echo-link is down.

Good and Welfare: Nothing to report at this time.

Radio sport: Irwin (KD3TB)

See the ARRL website for details

Hamfest: Tony (W3FLH)

Hamfest is scheduled for May 5, 2024 and will be held at the Bristol Campus of the BCCC.

A second talk about Mesh Networks is being arranged. The information on the website has been up-

dated.

Refreshments: Arlene (KA3PLA)

Arlene will have more coffee for future meetings as we seem to always run out.

Other Committees:

No additional reports.

Page 2 FEEDBACK

(Continued from page 1)

Old Business:

Club Station: Everything working with no problems. Now that the extra items have been cleared, the carpet will be cleaned.

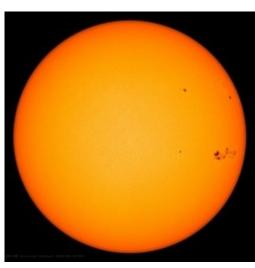
Field Day: Field Day is scheduled for the last Saturday and Sunday in June. A family picnic is being planned. Anyone with ideas or able to help, please let one of the club officers know.

New Business:

Club Officer Positions:

It's that time of year to start thinking about leaders for the 2024-25 year. The Nominating Committee currently consists of Dave KC3RAT and Tony N3YNH. Anyone interested in serving in any leadership position should let either Dave or Tony know of their interests. Anyone who would like to serve on the Nominating Committee should also let either Dave or Tony know.

Business meeting adjourned at 7:55 PM.



This solar disk image was taken on March 28, 2024. [Photo courtesy of NASA SDO/HMI]

The K7RA Solar Update

Tad Cook, K7RA, of Seattle, Washington, reports for this week's ARRL Propagation Bulletin, ARLP0013:

A dramatic increase in solar activity emerged over the past week, and geomagnetic activity reacted as well.

Two new sunspot groups appeared on March 21, then one new group emerged each day over March 22 - 25.

The average daily solar flux rose from 153.3 to 191.9, and the average daily sunspot numbers increased from 94.3 to 147.

The highest sunspot number over last week was 171 on March 22, which was the highest sunspot number since November 22 - 25, 2023, when the numbers were 174, 176, 184, and 179.

The average daily planetary A index jumped from 5.9 to 25.4, and middle latitude numbers rose from 5 to 19.

On March 24, the college A index in Fairbanks, Alaska, reached 100! The planetary A index was 64.

Looking ahead, the solar flux is predicted to reach a peak of 210 on April 23 - 24. The projected solar flux is 180 and 175 on March 28 - 29; 170 on March 30 - 31; 175 on April 1 - 3; 180 and 185 on April 4 - 5; 190 on April 6 - 7; 185, 180, 175, and 180 on April 8 - 11; 185 on April 12 - 13; 190, 185, 190, 185, and 180 on April 14 - 18; 175 on April 19 - 20; 200 and 205 on April 21 - 22; 210 on April 23 - 24, and 205, 190, and 180 on April 25 - 27.

The planetary A index forecast shows 5, 10, and 8 on March 28 - 30; 10 on March 31 through April 1; 8 and 5 on April 2 - 3; 12 on April 4 - 5; 5 on April 6 - 8; 8 on April 9 - 11; 5 on April 12 - 18; 8, 10, 10, and 8 on April 19 - 22, and 5 on April 23 - 29.

Sunspot numbers for March 21 - 27, 2024, were 141, 171, 146, 145, 163, 149, and 114, with a mean of 147. The 10.7-centimeter flux was 196.9, 197.6, 210.7, 195.1, 190.1, 178.2, and 174.6, with a mean of 191.9. Estimated planetary A indices were 27, 11, 36, 64, 22, 11, and 7, with a mean of 25.4. The middle latitude A index was 20, 10, 25, 43, 17, 11, and 7, with a mean of 19.

Send your tips, questions, or comments to k7ra@arrl.net.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, visit the ARRL Technical Information Service, read "What the Numbers Mean...," and check out the Propagation Page of Carl Luet-

(Continued on page 3)

FEEDBACK Page 3

(Continued from page 2)

zelschwab, K9LA.

A propagation bulletin <u>archive</u> is available. For customizable propagation charts, visit the <u>VOACAP Online for Ham Radio</u> website.

Share your reports and observations.

A weekly, full report is posted on <u>ARRL News</u>.

Courtesy ARRL Newsletter

Amateur Radio Importance Highlighted at National Hurricane Conference



The <u>National Hurricane Conference</u> was held March 25 - 28, 2024, in Orlando, Florida. Amateur radio was well represented at the event. A series of workshops were held that focused on amateur radio's involvement in hurricane tracking, coverage, and recovery.

Among the presenters was the Assistant Amateur Radio Coordinator of <u>WX4NHC</u> at the <u>National Hurricane Center</u> (NHC) Julio Ripoll, WD4R.

Ripoll gave a history of amateur radio's involvement in NHC, including the use of tube radios in the 1980s and the Yaesu FTDX-1200 used today. WX4NHC is also equipped with VHF/UHF radios to access the Florida Statewide Amateur Radio Network (SARnet), as well as digital equipment to communicate with the VoIPHurricane Net, IRLP, and Winlink to receive emails via amateur radio.

"We were the only means of communication between the National Hurricane Center and the National Weather Service Field Office in Slidell, Louisiana, during Hurricane Katrina," Ripoll said. He went on to highlight other instances of reports given by ham radio that provided mission-critical information that had a major impact on the way NHC handled a storm.



Julio Ripoll, WD4R, serves as the Assistant Amateur Radio Coordinator for WX4NHC. [Jim Palmer, KB1KQW, photo.]

ARRL Director of Emergency Management Josh Johnston, KE5MHV, gave a presentation to the crowd of hurricane experts, meteorologists, and emergency managers about the Amateur Radio Emergency Service® (ARES®).

He spoke of ARRL's role on the board of SAFECOM, a program managed by the Cybersecurity and Infrastructure Security Agency (CISA) that sets the standards of interoperability procedures. Being a part of the group solidifies the Amateur Radio Service as a robust resource before and during times of crisis.

Johnston shared that in 2023, ARES volunteers contributed at least \$21.8 million in volunteer hours to their local communities. "Is amateur radio still relevant? Absolutely! Are we still involved in the places that are doing things the right way? Amateur radio absolutely is," he said.

Johnston highlighted the relationship between ARRL and the Federal Emergency Management Agency (FEMA), as well as ARRL's position as a net control station within the SHAred RESources High Frequency Radio Program (SHARES) managed by CISA.



ARRL Director of Emergency Management Josh Johnston, KE5MHV. [Jim Palmer, KB1KQW, photo.]

Among other presenters was ARRL's <u>The ARES Letter</u> Editor Rick Palm, K1CE.

(Continued on page 4)

Page 4 FEEDBACK

(Continued from page 3)

He shared a harrowing tale of his family riding out a direct hit from Hurricane Idalia in August 2023. The damage and impact he felt gave him a new perspective on emergency communications, as he went from a volunteer communicator to a storm victim. Read more about his experience in the "Public Service" column in the January 2024 issue of *OST*.

Watch a <u>video of the amateur radio workshops</u> at the 2024 National Hurricane Conference on YouTube, courtesy of Jim Palmer, KB1KQW.



The ARRL ARES Letter Editor Rick Palm,

Courtesy ARRL Newsletter

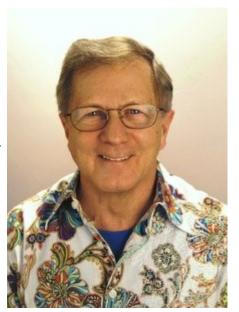
Bob Heil, K9EID, Silent Key

The man who defined the sound of live rock 'n' roll music and brought audio engineering principals into mainstream amateur radio use, Dr. Bob Heil, K9EID, has passed away at the age of 83.

He was an ARRL Life Member and in the ARRL Maxim Society. A Facebook post from Heil Ham Radio paid tribute to their founder: "Bob fought a valiant, yearlong battle with cancer, and passed peacefully surrounded by his family."

Heil founded Heil Sound in 1966, through which he created the template for modern concert sound systems for musicians like the Grateful Dead, The Who, Joe Walsh, and Peter Frampton.

The talk box used on iconic live record *Frampton Comes Alive!* was Heil's design. His audio engineering products have been featured in the Rock & Roll Hall of Fame, and he was honored in 2007 with the Parnelli Audio Innovator Award for his impact on the live sound industry. "My life has been about achieving great sound, whether on the concert stage or in the amateur radio world," Bob Heil recounted in 2022. "I've watched Heil Sound go from a regional sound company to a world-class microphone manufacturer. This company has been my passion," he said.



Bob Heil, K9EID.

Parallel to his commercial and artistic success in live music, was his passion for amateur radio. He was active in ham radio from a young age, and he merged his expertise in audio engineering with his love for radio. Heil Ham Radio was founded to produce microphones, headsets, and other gear for radio amateurs with an emphasis on high-quality audio.

Heil was known as a mentor who enjoyed helping others find success in ham radio.

Recently, his grandson Charlie Hartley, KF0OOP, became a licensed ham to surprise Heil for his birthday. <u>The pair attended the ARRL Midwest Convention/</u> Winterfest in St. Louis, Missouri, on January 27, 2024.

Heil was a generous donor to amateur radio organizations, including ARRL. Recently, he donated a host of new audio gear to the Hiram Percy Maxim Memorial Station, W1AW.



Heil with his grandson, Charlie Hartley, KF0OOP, at the ARRL Midwest Convention/ Winterfest.

(Continued on page 5)

FEEDBACK Page 5

(Continued from page 4)

His generosity and kind nature will be missed by many, including ARRL Director of Development Kevin Beal, K8EAL. "Bob was a titan in many areas. He was generous with his time, offered keen insights, and had the heart of a philanthropist in the ARRL Maxim Society," Beal said. "He was a gentleman to his core, making friends easily and everywhere he went, from rock stars to captains of industry. I consider it a real privilege to have become a friend to him, too, all because of amateur radio."

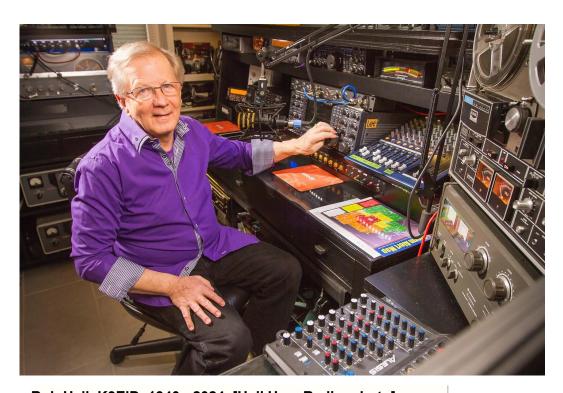
Heil was known for his passion for AM operations. He served for many years as an on-camera host of the Ham Nation podcast. Tributes to Heil have been flooding social media, including from his co-hosts.

ARRL President Rick Roderick, K5UR, said Heil's passing is a significant loss. "Bob Heil's technical achievements that brought high-quality audio to amateur radio pale in comparison to his generosity and willingness to help his fellow ham. He's long been known as someone eager to help mentor and teach. His legacy on our hobby will be long-lasting. Our thoughts are with his loved ones."



"RIP, man. I love you and miss you already. Sending love to Sarah and to the world of audioheads you leave behind," said rocker Joe Walsh, WB6ACU, in <u>a Facebook post</u>. [Joe Walsh, WB6ACU, photo]

An obituary for Heil may be viewed at this link.



Bob Heil, K9EID, 1940 - 2024. [Heil Ham Radio, photo]

Courtesy ARRL Newsletter

Page 6 FEEDBACK

Amateur Radio Stands Ready to Support Eclipse Operations

The upcoming April 8, 2024, solar eclipse has many excited about the opportunity to witness the darkness of totality. Spectators from across the country are traveling to the path of total darkness that will stretch from South Texas to Northeastern Maine.

Some states are anticipating more than a million travelers for the event. In the impacted areas, schools will be letting students out early for the day, and residents are being encouraged to avoid driving on the day of the event. Emergency response organizations are adding staff for the event in many areas. The eclipse is expected to directly impact parts of 14 states as it moves across the country. The travel impact alone could be substantial.

In preparation for the event, many state emergency management organizations have called on local hams to provide communication services via HF nets and locally on VHF/UHF frequencies. There have been numerous planning meetings, exercises, and preparations across the country. The <u>ARRL Emergency Management department</u> has worked with ARRL Section Emergency Coordinators and Section Managers in the directly affected areas to collect the frequencies each Section plans to utilize, and to assist in any frequency conflicts. Hams across multiple states and ARRL Sections have been practicing their communications capabilities via Winlink, SSB,



The second "diamond ring" phase of the 2017 Great American Eclipse, as seen in Madras, Oregon. [Sierra Harrop, W5DX, photo]

and CW. "It is great to see Sections along the path working together to be prepared to assist in any emergency, should it occur during the event," said ARRL Director of Emergency Management Josh Johnston, KE5MHV. "Heavy traffic is the major concern, but [anything can happen] during such a large event," he added.

Johnston went on to say, "There will be several on-air operating events on the day of the eclipse, but please give some space for any emergency traffic that may be taking place as well."

Ham Radio Science Citizen Investigation (HamSCI) is leading the <u>Solar Eclipse QSO Party</u> which will allow radio amateurs to participate in propagation research by operating during the eclipse and submitting their logs. Much of that activity will be focused on the FT8 frequencies of the non-World Administrative Radio Conference (WARC) HF bands, but all modes will be welcome during the event.

SELP SOLAR ECLIPSE QSO PARTY

Courtesy ARRL Newsletter

Elmer's Corner

Welcome to Elmer's Corner. This will be a section where hams can request help with ham related issues. Our goal is to match someone with experience with the issue you are having in order to resolve your problem. This is intended to cover all aspects of ham radio:

Equipment

Software

Antennas

Operations

Send the editor an email detailing the issue: wa4ywm@comcast.net.

FEEDBACK Page 7

2024 Contest Calendar

April

21 Rookie Roundup - Phone

1800 to 2359 UTC

May

25-26 CQ WW WPX Contest, CW

0000Z, May 25 to 2359Z, May 26

June

8-10 June VHF

1800 UTC Saturday, ends 0259 UTC Monday

22-23 Field Day

1800 UTC Saturday, end 2059 UTC Sunday

OSO Parties

Missouri 1400Z, Apr 6 to 0400Z, Apr 7 and 1400Z-2000Z, Apr 7

 Mississippi
 1400Z, Apr 6 to 0200Z, Apr 7

 Louisiana
 1400Z, Apr 6 to 0200Z, Apr 7

 New Mexico
 1400Z, Apr 13 to 0200Z, Apr 14

 North Dakota
 1800Z, Apr 13 to 1800Z, Apr 14

Georgia 1800Z, Apr 13 to 0359Z, Apr 14 and 1400Z-2359Z, Apr 14

Nebraska 1100Z, Apr 20 to 2259Z, Apr 21 Michigan 1600Z, Apr 20 to 0400Z, Apr 21

Florida 1600Z, Apr 27 to 0159Z, Apr 28 and 1200Z-2159Z, Apr 28

> ATLANTIC DIV. HAMFESTS > 2024

April 20 - <u>Delmarva Amateur Radio and Electronics Expo, ARRL Delaware State Convention</u>

Cheer Center 20520 Sand Hill Rd. Georgetown, DE 19947

April 21 - Maryland Mobileeers Spring Hamfest

Odenton Volunteer Fire Company 1425 Annapolis Rd. Odenton, MD 21113 https://sites.google.com/view/marylandmobileers/hamfest?authuser=0

April 27 - York Hamfest

Elicker's Grove Park 511 Roth Church Rd. Spring Grove, PA 17362 http://www.yorkhamfest.org

May 5 - Warminster ARC - Annual Hamfest

Bucks County Community College-Lower Bucks Campus

1304 Veterans Highway (Route 413)

Bristol, PA 19007

https://wp.k3dn.org/hamfest/

May 11 - Hamfest at the Shore

Surf City Firehouse

713 Long Beach Island

Surf City, NJ

http://www.obarc.org

V.E. TEST LOCATIONS

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must bring two forms of positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. The ARRL VEC'S 2024 test fee is \$15.00.

Warminster Amateur Radio Club, Monthly, Last Mon. 7:00 pm at the Wilson Senior Community Center 580 Delmont Avenue Warminster, PA 18974 George Brechmann (215) 443-5656.

Atco, NJ, The fourth (4th) Tuesday of each month, at 7 p.m. Winslow Township Senior Center, 33 Cooper Folly Road, 08004-2603.

Mark (K2AX) jtra@comcast.net

Levittown, PA, Monthly, 1st Wednesday at 6:30. Levittown Library - Ben Johns, K3JQH, 215-657-5994

Telford, PA, RF Hill ARC. Indian Valley Library. Held the third Monday of odd months (January, March, May, July, September, November)
Contact: Jim Soete 215-723-7294
wa3ylq@arrl.net.

Philadelphia, PA, Testing is done on the 3rd, non holiday Monday of the month at the Giant Supermarket, 315 York Rd., Willow Grove, 19090 at 6:30 PM in the Community Room. For further information contact James McCloskey at jmccloskey@msn.com and by phone 215-275-2979.

Lansdale, PA Testing on the fourth non-holiday Thursday of the month starting at 7:00 PM. The Lansdale Library Community Room Vine St. and Susquehanna Ave. Lansdale, Pa. Registration is required 48 hrs. or more before the scheduled exam date. If there are no registrations the scheduled exam date will be canceled. NO WALK-INS. You can register by contacting: Olaf N. Markert - Phone (610) 517-5074, E-mail w3pa@arrl.net Alt Contact: Jim, 610-287-5630

Page 8 FEEDBACK

CLUB INFO

PUBLIC SERVICE

May – Warminster Memorial Day Parade June – Golf Outing October – Golf Outing Part

CLUB STATION

The WARC club station is open to anyone with an interest, on the first Thursday of the month (meeting night) between the hours of 6:30 and 7:30 pm. with the exception of the December dinner meeting For further information, call George Brechmann N3HBT at 215-443-5656.

WARC ALUMNI MEMBERSHIP

An Alumni membership category is available for WARC members who are unable to attend meetings and club activities on a regular basis because of health considerations, travel impediments, or other hardships. Dues for the Alumni membership are \$12.50 annually and are approved by the Board. Please contact the Membership Committee for more information if interested."

ATTENTION MEMBERS

The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even numbered months. If you do not have at least a Warminster Amateur Radio Club badge with your picture on it, please contact your Membership Chairs at the WARC monthly meetings. Otherwise, please contact Membership by email at: membership@k3dn.org.

If you want to have your picture taken to be placed on the 'Members' Photos' section of the www.k3dn.org website, please contact Membership with your interest. When we get enough people who are interested we will post a notice in Feedback and have a camera ready at the following club meeting.

PROGRAMS 2024

- April: Antenna Simulators (Dan Clementi K3GMQ)
- May Hamfest Preparations
- June Pizza Night / Bucks County History

The Club Station - K3DN - is located at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. The station is open for club members and the interested general public on the first Thursday of the month (meeting night) between the hours of 6:30 and 7:30 pm. with the exception of the December dinner meeting . The station is fully operational on HF (80 meters through 10 meters) both phone and CW. There is an assortment of amateur radio shareware which may be copied under the shareware licensing agreement.



For additional information on the Club Station please call the Station Manager N3HBT - George at 215-443-5656.

WARC Meetings are held the first Thursday of each month at 7:30 pm at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. Talk in is available on the 147.09 & 443.950 repeaters. **FEEDBACK** Page 9

SKYWARN INFORMATION

Bucks County SKYWARN Weather Spotter PRIMARY FRE-QUENCY: 147.300MHZ (+ 131.8)

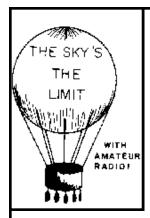
Fairless Hills, PA (many remote access locations throughout Bucks County)

Mount Holly NWSFO SKYWARN Homepage:

https://www.weather.gov/phi/Info

SKYWARN Basic Weather Spotter Educational Programs URL:

https://www.weather.gov/phi/classes



The Warminster Amateur Radio Club Announces Free Ham Radio Instructional Classes

If you're interested in Ham Radio, or think you might be, this is your opportunity. Perhaps you'd like to learn about digital communications, VHF, UHF, satellite, or perhaps you'd rather sit down and chat with someone in South Africa, Russia, Great Britain or in the space station.

New Classes (Tech and General) to start Sept 13 from 7 pm to 9 pm.

For further information contact George Brechmann, N3HBT at 215-443-5656.

Bucks County Amateur Radio Emergency Service (BCARES)

www.bucksares.org

Bucks County ARES will be on the air Wednesdays, at 9:00 PM. We will be using Warminster Amateur Radio Club's repeater on 147.090, pl 131.8. This net is linked as shown in the Net Schedule box for the Wednesday night net. It may also be linked to 147.300.

Winlink Gateway Stations:

Lower Bucks NY3J-10 145.530 Bensalem

Net Schedules			
Sunday	2000	10 Meter Net	28.445 MHz
Wednesday	2000	2 Meter Net	147.09 Rptr.
Wednesday	2000	Linked w/ 2 Meter Net	443.95
Rptr.Wednesday	2000	Linked w/ 2 Meter Net	53.230 Rptr.
Sunday	2030	Informal Net	223.5 Simplex
Thursday	1900	Mont. Cnty RACES Net	

CLUB EQUIPMENT

WARC has 2 Baofeng UV-5R dual band HT's and a Yaesu FT-2900 2M mobile that are available for use by members of the club. The radios are available on a month-by-month basis and have been purchased primarily to help new hams get on the air. However, they may also be used by any club member who is in need of a temporary 2-meter radio. They are also available for use by participants in WARC's public service activities. DE, Dave McGowan KC3RAT

Area Repeaters

VHF

145.310 R.F. Hill

145.350 Doylestown R.C.

146.790 Penn Wireless

145.330 Hilltown

146.670 DVRA

146.685 Holmesburg

146.925 Willingboro

147.000 Ham Buergers

147.030 Phil-Mont

147.090 Warminster

147.270 Frankford 147.300 BEARS

147.390 CBRA

220

224.580 PackRats

223.76 K3NAL

UHF

442.650 DVRA

443,250 TAG

443.050 Metro-Comm

443.950 Warminster

444.200 BEARS

447.475 WR3B

448.225 Penn Wireless

444.759 RF Hill Analog/ **Fusion**

D-STAR

146.61000 K3PDR DV 445.18125 K3PDR DV 445.01875 AA3E Montco RACES

6 Mtr

53.030 WA3BXW 53.230 N3DOZ 53.320 K3MFI

Page 10 **FEEDBACK**

Are you submitting an article for the Feedback?

Contributions of articles to be published are always accepted for consideration. Please follow these guidelines:

E-Mail to:

wa4vwm@comcast.net Or via snail mail to: FEEDBACK EDITOR Warminster Amateur Radio Club

> Box 113 Warminster, Pa 18974

- Use both upper and lower case
- Use your program's spell check.
- If you don't have a computer, then typewritten sheets are o.k. but please use both upper and lower case.
- Put your name and call at the beginning or end of the article, and show credits if you are using material from another source.
- Deadline for articles is the Saturday before the regular meeting.

For general club correspondence:

WARMrcinfo@gmail.com

Visit our Home Page at: http://www.k3dn.org

The annual dues rate structure is as follows:

\$25.00 **Full Member:** \$ 7.50 **Student:** Alumni: \$12.50

Are your dues current?

2024 Officers

Executive Officers

President Ray Oechslin KA3TRU 267-269-3198 Vice-President Dave McGowan KC3RAT 215-850-5846 Secretary Tony Simek N3YNH Treasurer Tom Newman K3PLA 215-630-5965 Director (A) Doug Becker KC3MNO 215-932-1370 Director (E) Larry Abbott WA3ELQ 215-704-3282 Bruce Farrington WA3ZPC 215-262-4215 Director (A) Director (E) George Brechmann N3HBT 215-443-5656 Past President Tony Cuttone W3FLH 267-679-9297

Committee Chairpersons ARES/RACES Liason Karl Harris ARRL Liason Irwin Darack Awards Manager Vince Pironti Dave McGowan Classes Dan Clementi Digital and APRS Ron Wenig Feedback Editor Jim Elmore Field Day 24 Herb Hickmott Hamfest 24 Tony Cuttone Hamwear Kathy Acker Holiday Dinner George Brechmann Tony Cuttone Membership Net Manager George Brechmann PA QSO Party Mark Kempisty Publicity Herb Hickmott Refreshments Arlene Newman RF Interference Bill Ballantine Repeater Coordinator Brian Taylor Safety Officer Mike Malone Station Trustee George Brechmann Good and Welfare Regina Litman Township Liason George Brechmann N3HBT VE License Testing Larry Abbott WA3ELQ 215-704-3282 VHF/UHF/MW George Altemus KA3WXV 215-855-3856 KC3FBY 215-815-7978 Website Coordinator Kathy Acker Youth Programs

K3KH 215-264-1855 KD3TB 215-343-8170 KD3TC 215-674-0446 KC3RAT 215-850-5846 K3GMO NY3J 215-638-9257 WA4YWM215-538-1889 KB3VMN 267-718-3601 W3FLH 267-679-9297 KC3FBY 215-815-7978 N3HBT 215-443-5656 W3FLH 267-679-9297 N3HBT 215-443-5656 AA3K KB3VMN 267-718-3601 KA3PLA 215-345-4539 K3FMO 215-766-0764 N3EXA 215-257-6303 W3MJM 215-639-2175 N3HBT 215-443-5656 KC3LRF 215-443-5656